

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

| Southern California Edison Company's Application For Approval of Embedded Energy Efficiency Pilot Programs for 2007-2008. | Application 07-01-024 (Filed January 16, 2007) |
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| Application of Pacific Gas and Electric Company Seeking Approval of Water-Embedded Energy Savings Pilot Program. | Application 07-01-026 (Filed January 16, 2007) |
| San Diego Gas & Electric Company for Approval of Energy & Water Efficiency Partnership and Budget for Years 2007 Through 2008. | Application 07-01-029 (Filed January 16, 2007) |
| Southern California Gas Company for Approval of Energy & Water Efficiency Partnership and Budget for Years 2007 Through 2008. | Application 07-01-030 (Filed January 16, 2007) |

REQUEST FOR AWARD OF INTERVENOR COMPENSATION BY THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) FOR SUBSTANTIAL CONTRIBUTIONS TO DECISION 07-12-050

February 19, 2008

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REQUEST FOR AWARD OF INTERVENOR COMPENSATION BY THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) FOR SUBSTANTIAL CONTRIBUTIONS TO DECISION 07-12-050

I. Introduction and Summary

Pursuant to California Public Utilities Code §1801 et seq. and Rules 17.3 and 17.4 of the California Public Utilities Commission's (CPUC) Rules of Practice and Procedure, the Natural Resources Defense Council (NRDC) respectfully submits this request for an award of compensation for our substantial contribution to Decision (D.) 07-12-050, relating to the approval of pilot programs and associated studies and evaluations to be implemented variously by the four applicant investor-owned utilities (IOUs or utilities) and the Commission's Energy Division. NRDC requests that the Commission award NRDC compensation for staff and consultant time and expenses in the total amount of \$41,453.15.

On March 1, 2007, the Natural Resources Defense Council (NRDC) filed a Notice of Intent to Claim Compensation in this proceeding. NRDC received a finding of significant

financial hardship and was declared to have met the eligibility requirements for receiving intervenor compensation in a written ruling issued by Administrative Law Judge (ALJ) Weissman in this proceeding dated April 3, 2007. Based on the subsequent Assigned Commissioner Ruling and Scoping Memo on April 23, 2007, NRDC filed an Amended Notice of Intent to Claim Compensation on May 23, 2007 in this proceeding in order to update its estimated compensation request in light of the Scoping Memo. Both notices of intent were timely.

This request for intervenor compensation includes a detailed account of services and expenditures for relating to activities in this proceeding, as well as a detailed description of NRDC's substantial contribution to D.07-12-050.

II. Timeliness

This motion is made pursuant to the California Public Utilities (CPU) Code §1804(c), which states that an eligible party has 60 days after a final decision or order closing the proceeding to file a request for intervenor compensation. The effective date of D.07-12-050 was December 21, 2007; therefore, this request is timely.

III. NRDC's Contribution has been Substantial and is Sufficient to Warrant Full Compensation for Its Efforts

NRDC has made a substantial contribution to this proceeding. A substantial contribution is defined by CPU Code §1802(i) as:

"...in the judgment of the commission, the customer's presentation has substantially assisted the commission in the making of its order or decision because the order or decision has adopted in whole or in part one or more factual contentions, legal contentions, or specific policy or procedural recommendations presented by the customer. Where the customer's participation has resulted in a substantial contribution, even if the decision adopts that customer's contention or recommendations only in part, the commission may award the customer compensation..." (emphasis added)

A. NRDC's Substantial Contributions

In Decision 07-12-050, the Commission directed the four major energy investor-owned utilities (IOUs or utilities) regulated by the Commission to implement a series of pilot programs and associated studies and evaluations, the broad purpose of which is to examine more closely the potential for energy to be saved cost effectively by reducing embedded energy use associated with water use. The decision also directed the Energy Division to implement several studies designed to establish foundational data and understanding central to this broader purpose, and indicated the Commission's intent to undertake further efforts to develop its cost-effectiveness calculator for water-energy saving measures and programs.

NRDC was instrumental in initiating this proceeding through our work in the energy efficiency proceedings, R.06-04-010 and A.05-06-004 et al. NRDC first raised the issue of potential energy savings through water conservation in A.05-06-004 et al., submitted potential questions at the intial prehearing conference of R.06-04-010 to guide the Commission's investigation into the issue, submitted comments, and helped organize and cosponsor a workshop among the parties to discuss embedded energy savings associated with water savings. This NRDC-catalyzed activity subsequently resulted in the October 16, 2006 "Assigned Commissioner's Ruling on Process Related to the Consideration of Embedded Energy Savings Related to Water Efficiency" in R.06-04-010, which directed the utilities to file the pilot applications that are the subject of this proceeding. Although NRDC does not herein request compensation for these hours expended in R.06-04-010, NRDC reserves its right to request compensation for that time in R.06-04-010.

NRDC was active throughout this proceeding, including participating in the prehearing conference and workshops, meeting with Commissioners' offices, and filing four sets of written comments (as itemized in Attachment A). NRDC contributed substantially during the formative stages of this proceeding, during which the utilities and parties discussed and debated many aspects of the utilities' applications, and as a result, these applications underwent significant alterations and improvements. As the proceeding's lone environmental advocacy party, NRDC's efforts provided a unique, relevant perspective in the deliberations leading up to the utilities' July 2007 revised applications. In addition, several aspects of the Final Decision reflect NRDC's positions and incorporate our recommendations, as described below.

1. Policy Standard for Cost Effectiveness of Energy Efficiency Programs

In one of its ordering paragraphs, the Proposed Decision stated that the Commission supported utility efforts to energy-embedded water savings only to the extent that such efforts improve the overall cost-effectiveness of the utilities' energy efficiency programs. In NRDC's opening comments on the Proposed Decision NRDC pointed out that the more appropriate standard, as set out in prior Commission decisions, is simply that utilities' energy efficiency programs and measures be deemed cost effective, not more cost effective than the average of the utilities' preexisting energy efficiency programs. The Commission modified D.07-12-050 accordingly.

2. Oversight, Review, and Input on Pilots and Studies

The Proposed Decision was silent regarding the matter of whether and how the ongoing 18 months of water-energy efficiency programs and studies authorized by the Commission in this proceeding would receive oversight, review, and input from the parties, the general public, and other stakeholders. In meetings with Commissioners' offices and in both opening and reply comments on the Proposed Decision NRDC stressed the need to create opportunities for ongoing oversight, review, and input of the utilities' pilot programs and the various studies authorized by the Commission. The Final Decision responded to NRDC's recommendations as follows:

...we are convinced of the merit of providing ample opportunity for public comment on the study plans and program results...

...we will ensure that there is meaningful opportunity for input on the study design...

We agree that public vetting of the draft study plans is necessary and likely beneficial.²

3. Relationship Between Foundational Studies and Cost-Effectiveness Calculator

The Proposed Decision did not articulate an explicit linkage between the results of the two foundational studies to be completed by the Energy Division and the cost effectiveness calculator that will ultimately be used to evaluate the economics of prospective energy-water efficiency proposals. It also did not contain a commitment to undertake further development of calculator, stating only that this would be explored.³ In meetings with Commissioners' offices

¹ See Proposed Decision Ordering Paragraph 1, at 93.

² D.07-12-050 at 88 and 89.

³ Proposed Decision at 79.

and in both opening and reply comments on the Proposed Decision NRDC stressed the centrality of the cost-effectiveness calculator to determining whether and what full-scale programs might be authorized by the Commission in the future, and for this reason urged the Commission to commit to initiating its further development. In response, the Commission made explicit in the Final Decision its commitment to linking the foundational studies to the further development of the calculator:

The Energy Division will consider revisions to the calculator based on the outcome of the studies and work with the Commissioner assigned to the energy efficiency rulemaking proceeding to establish a procedure for public review of and comment on the study results and calculator revisions.⁴

4. Approval Basis for Pilots

NRDC recommended that the Commission not base its pilot program approval decisions on formal cost effectiveness evaluation by the current cost-effectiveness calculator, since the current calculator is not capable of comprehensively addressing the statewide energy implications of saving water within individual utility service areas. D.07-12-050 accurately characterized NRDC's position in this regard: "NRDC believes the Commission should not require a formal cost-effectiveness evaluation [of the pilots] since the tool for doing such testing is not yet fully developed, and might compromise early exploration and learning." D.07-12-050 effectively adopted NRDC's recommendation, since none of the utility-proposed pilot programs ultimately approved by the Commission were found to be cost effective by the current calculator.

5. Disposition of Water Utilities' Pilot Program Proposal

In its reply comments on the Proposed Decision NRDC recommended that the Commission not approve at this time a recommendation that the four utility applicants in A.07-01-024 et al enter into pilot programs with Commission-regulated water utilities. Since this effort would be starting from scratch, whereas the proposed pilots had been in development for over a year, NRDC supported having the Commission direct both the energy and water IOUs to work together to see what additional promising, value-added programs might be developed. D.07-12-050 effectively adopted this recommendation.⁶

⁴ D.07-12-050 at 77.

⁵ *Id*. at 44.

⁶ *Id.* at 87-88.

Based on the foregoing, NRDC submits that it has made a substantial contribution to the Commission's deliberations and decision making in A.07-01-024 *et al*.

IV. Duplication of Showing of Other Parties and Overall Benefits of Participation

NRDC's compensation in this proceeding should not be reduced for duplication of the showing of other parties. The intervenor compensation statutes allow the Commission to award full compensation even where a party's participation has overlapped in part with showings made by other parties (§1802.5). NRDC made a concerted effort to coordinate with other parties in this proceeding, including trying to find common ground on various issues related to the utilities' applications.

Other than NRDC, there were only two consistently active parties in this proceeding, the Division of Ratepayer Advocates (DRA) and The Utility Reform Network (TURN). In meetings, workshops and various other discussions, NRDC worked cooperatively with DRA and TURN (as well as the utilities) in an effort to shape the utilities' applications in ways that resolved many of both DRA and TURN's concerns and NRDC's concerns. NRDC believes that these efforts resulted in significant improvements in the utilities' applications, helped to avoid the need for hearings, and enhanced timely Commission decision making. Any overlap in the showings of NRDC with DRA and TURN, which was modest in any case, was the result of such cooperative efforts as opposed to overlapping initial positions. Notwithstanding this considerable amount of convergence, NRDC's filings in this proceeding contain a number of recommendations and arguments not shared with either TURN or DRA, and *vice a versa*. NRDC submits that the modest amount of overlap in its positions with DRA and TURN were significantly outweighed by the number of distinct recommendations and positions of NRDC *vis a vis* these two other parties.

In D. 98-04-059, the Commission adopted a requirement that a customer must demonstrate that its participation was "productive," as that term is used in §1801.3 (pp.31-33). The Commission directed customers to demonstrate productivity by assigning a reasonable dollar value to the benefits of their participation to ratepayers. NRDC's continued focus in this and other proceedings on policies that ensure a reliable, affordable and environmentally sustainable energy resource portfolio should have lasting benefits to billpayers. While our policy and procedural contributions can be difficult to quantify in monetary terms, we submit that

NRDC contributed substantially to the adoption of the policies and procedures that will guide the IOUs' water-energy pilot programs and associated studies and evaluations.

As noted in D.07-12-050, a California Energy Commission (CEC) report entitled "California's Water-Energy Relationship," found that water-related energy use consumes 19% of the state's electricity, 30% of its natural gas, and 88 billion gallons of diesel fuel, per year. If the programs and studies approved in D.12-07-050 should provide a foundation for full-scale, cost-effective water-energy savings efforts, the benefits to utility billpayers therefore can reasonably be expected to be on the order of many millions of dollars annually for many years. In addition, such cost-effective energy savings would significantly reduce greenhouse gas emissions and thereby contribute to meeting the state's 2020 greenhouse gas emissions limit required by Assembly Bill 32, the Global Warming Solutions Act of 2006. For instance, NRDC has estimated that increased urban water use efficiency across the state, through reduced energy use, could reduce the state's GHG emissions by up to 4.8 MMTCO2e from business-as-usual emissions in 2020.

Therefore, we believe that NRDC's participation in this proceeding was demonstrably productive.

V. Itemization of Costs

A. Summary

NRDC's total costs incurred of \$41,453.15 for contributions as an individual intervenor contributing to D.07-12-050 are reasonable. According to CPU Code §1802, NRDC is eligible for compensation of "...reasonable advocates' fees, reasonable expert witness fees, and other reasonable costs of preparation for and participation in a proceeding and includes the fees and costs of obtaining an award under this article...." A detailed set of staff and consultant time and expense records is provided in Attachment B.

The following is a summary of NRDC's requested compensation. All professional time was spent in 2007. All the time spent preparing this intervenor compensation was in 2008. For

⁷ California Energy Commission, "California's Water-Energy Relationship," Publication CEC-700-2005-011-SF, November 2005, http://www.energy.ca.gov/2005publications/CEC-700-2005-011/CEC-700-2005-011-SF.PDF.

8 D.07-12-050 at 2.

⁹ See NRDC Scoping Plan recommendation submitted to CARB, "Urban Water Use Efficiency," October 1, 2007, available at http://www.arb.ca.gov/cc/scopingplan/submittals/electricity/nrdc_water_efficiency_final.pdf.

the sake of administrative efficiency, NRDC proposes to use 2007 rates for this modest amount of 2008 time as long as doing so does not create a prejudgment of the intervenor representatives' otherwise applicable 2008 rates. If this is not acceptable, NRDC requests that the Commission notify NRDC as such so that we may submit a supplemental request addressing 2008 rates. All time spent on intervenor compensation matters is weighted at 50% in order to comport with the requirement that such time be compensated at half the otherwise applicable professional rate.

| NRDC Staff | | | | | |
|------------|--------------|----------------|-------------|----------|----------------|
| | Time (hours) | Rate (\$/hour) | Labor | Expenses | Requested Comp |
| Chang | 24.75 | \$150.00 | \$3,712.50 | \$0.00 | \$3,712.50 |
| Wanless | 30.75 | \$125.00 | \$3,843.75 | \$0.00 | \$3,843.75 |
| Cohen | 28.75 | \$150.00 | \$4,312.50 | \$0.00 | \$4,312.50 |
| TOTAL | 84.25 | | \$11,868.75 | \$0.00 | \$11,868.75 |

| NRDC Consultant | | | | | |
|-----------------------------------|--------|----------|-------------|----------|----------------|
| Time (hours) Rate (\$/hour) Labor | | | | Expenses | Requested Comp |
| Murley | 151.60 | \$195.00 | \$29,562.00 | \$22.40 | \$29,584.40 |
| TOTAL | 151.60 | | \$29,562.00 | \$22.40 | \$29,584.40 |

| GRAND TOTAL | \$41,453.15 |
|--------------------|--------------|
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B. The Hours, Hourly Rates, and Costs Sought in this Request are Reasonable and Should be Approved

1. The Hours Claimed are Reasonable and Properly Detailed

NRDC maintained detailed time records indicating the number of hours that were devoted to proceeding activities, with a description of each separate activity on which hours were spent. All hours represent substantive work related to this proceeding. These hours are conservative and no time was claimed for travel. Attachment B contains a daily listing of time devoted to this proceeding for NRDC's expert staff, Audrey Chang, Ronnie Cohen, and Eric Wanless, and expert consultant Clyde Murley, as well as detailed records of expenses. Attachment C contains the qualifications of each of these intervenor representatives.

2. The Rates Sought are Reasonable

The energy project staff in NRDC's San Francisco office has participated in Commission proceedings for over 25 years and has extensive experience in promoting cost-effective energy

efficiency, resource diversity, and other measures that work to increase the sustainability and mitigate environmental and economic impacts of electricity and natural gas production and use. The Commission's recognition of NRDC's role as a leading spokesgroup for public interest values has been demonstrated by repeated invitations to appear at full panel hearings. Public Utilities Code §1806 directs the Commission to consider "the market rates paid to persons of comparable training and experience who offer similar services" when computing a compensation award. The rates requested by NRDC for its expert staff have been made to be consistent with D.07-01-009, which established rate ranges for experts based on years of experience. Historically, the rates that NRDC has requested were purposely conservative, and not only reflected rates far below market for expertise at similar levels, but also far below other requests received by the Commission. We have revised our requested rates to be consistent with the Commission-adopted rate ranges, but continue to request rates at the low ends of those ranges. The rate requested for Mr. Murley is also very conservative in that it is in the lowest quintile in the range of Commission-approved rates for experts in Mr. Murley's experience range.

a. Audrey Chang

NRDC requests a 2007 hourly rate of \$150 for Audrey Chang. Although this rate is different from that listed in NRDC's Amended Notice of Intent filed on May 23, 2007, this revised hourly rate request is the same as that requested in NRDC's pending request for compensation filed in R.06-04-010. Although NRDC's request for a 2007 hourly rate of \$150 for Ms. Chang is a significant increase from the \$115 hourly rate we requested for Ms. Chang's work in 2006 in that December 21, 2007 request, it is consistent with D.07-01-009, as it falls at the lowest end of the 2007 range adopted by D.07-01-009 for experts with 7-12 years of experience. Historically, NRDC has requested and been rewarded rates that fall far below market for expertise at similar levels, but also far below other requests received by the Commission. Now that the Commission has established ranges for expert hourly rates in D.07-01-009, we revise our rate requests to be consistent with those Commission-adopted ranges. In addition, since Ms. Chang began work performed before the CPUC in 2005, she increased her skills and expertise and was promoted in 2007 and now leads NRDC's work at the CPUC. A requested rate of \$150 for Ms. Chang's work performed in 2007 falls at the lowest end of the range of expert rates in order to remain purposely conservative.

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¹⁰ NRDC Request for Award of Intervenor Compensation, R.06-04-010, December 21, 2007.

Ms. Chang has a Master's degree in Energy Engineering and a Bachelor's degree in Earth Systems, both from Stanford University. Ms. Chang has seven years of experience working on energy and environmental issues, including the past three years spent working in Commission proceedings. Prior to joining NRDC in 2005, Ms. Chang worked in energy efficiency and green building consulting at Energy Solutions and at Stanford University.

b. Eric Wanless

NRDC requests an hourly rate of \$125 for work performed by Eric Wanless in this proceeding. This rate is at the lowest end of the 2007 ranges adopted by D.07-01-009 for experts with 0-6 years of experience. Mr. Wanless has a Master's degree in Energy Engineering and a Bachelor's degree in Environmental Science, both from Stanford University. Mr. Wanless has three years of experience working on energy and environmental issues.

c. Ronnie Cohen

NRDC requests an hourly rate of \$150 for Ronnie Cohen. NRDC's request for a 2007 hourly rate of \$150 for Ms. Cohen is consistent with D.07-01-009, as it falls at the lowest end of the 2007 range adopted by D.07-01-009 for experts with 7-12 years of experience. Ms. Cohen has a Master's degree in Public Policy from UC Berkeley and a Bachelor's degree in Environmental Studies from Brown University. Ms. Cohen has over twelve years of experience working on water and environmental issues. She has served on the Steering Committee of the California Urban Water Conservation Council, and was appointed to the Landscape Task Force established by the state legislature. She is the author of several reports on water efficiency, including *Energy Down the Drain: The Hidden Cost of California's Water Supply*, which has been credited for initiating the recent focus on the connection between water and energy consumption. Prior to joining NRDC in 1994, Ms. Cohen worked as a consultant for Barakat & Chamberlin, specializing in water efficiency and Integrated Resources Planning.

d. Clyde Murley

NRDC requests an hourly rate of \$195 for work performed by Clyde Murley in this proceeding. This is the same rate requested on behalf of Mr. Murley in a pending intervenor

compensation request in R.06-02-012 by the Union of Concerned Scientists. Mr. Murley's last awarded rate at the Commission is \$173, which was first set in 2004. Since that time, D.07-01-009 awarded intervenor representatives with a 3% cost-of-living adjustment (COLA) for 2006. Applying the Commission's rounding convention would bring Mr. Murley's 2006 rate to \$180. D.07-01-009 further provided for a 2007 COLA and for intervenor representatives to receive up to two annual 5% "step" increases within each experience level. Mr. Murley's rate has never been increased for reasons of merit and has otherwise remained at \$173 since 2004; Mr. Murley has represented clients before the Commission since 2004, and since January 2005 he has been doing so as the owner of his own consulting firm. NRDC therefore requests that Mr. Murley receive a 5% step increase for 2007. Applying the 5% step increase, plus a 3% 2007 COLA, together with rounding, would yield a 2007 rate of \$195. This rate is still in the bottom quintile of the range of 2007 expert rates for his experience category, which is 13+ years. As such, it is well within the bounds of permissible step increases specified in D.07-01-009. NRDC therefore requests a rate of \$195 for Mr. Murley's 2007 work related to D.07-12-050.

Mr. Murley is an independent consultant with 20 years of professional experience in energy and environmental issues, including policy and technical experience and expertise in the areas of energy efficiency, renewable energy, demand response, integrated resource planning, energy economics, energy procurement, and environmental protection, and he has served as an expert witness in several of these areas. Mr. Murley represents clients both as a subject-matter expert and as an advocate in evidentiary and settlement proceedings. Mr. Murley's experience includes four-plus years with Grueneich Resource Advocates, where he represented clients before this Commission; three-plus years on the staff of the CPUC, where he managed environmental studies and advised the Commission on integrated resource planning and energy efficiency matters; three-plus years with the Natural Resources Defense Council, and four years during which he founded, directed, and taught in a graduate environmental studies program at Antioch University. Mr. Murley has also worked for PG&E as a research manager and has held various energy and environmental consulting positions. Mr. Murley holds two degrees from the University of California, Berkeley, a B.A. in Environmental Sciences, and a M.A. in Energy and Resources.

¹¹ Request for an Award of Compensation to the Union Of Concerned Scientists for Substantial Contributions to Decision 07-05-028, September 19, 2007, In R.06-02-012.

¹² Since the 2007 13+ year expert category has a range of \$150 to \$380, \$150 to \$196 defines the bottom quintile of this range.

3. The Costs Sought are Reasonable

The only costs sought in this request are for NRDC's consultant's three round-trip Bay Area Rapid Transit (BART) fares from the East Bay to San Francisco for attendance at a workshop and meetings with Commissioner advisors. NRDC submits that these costs are reasonable. All costs are directly related to travel necessary for participation in this proceeding. Whenever possible, NRDC minimized costs as much as possible. NRDC claims travel expenses for its own staff only for substantial travel away from our office. Thus, the costs we claim here are conservative.

VI. Conclusion

NRDC has met all requirements for a finding of eligibility for compensation in this proceeding. NRDC requests compensation for staff fees and expenses in the total amount of \$41,453.15.

Dated: February 19, 2008

Respectfully submitted,

Audrey Chang Staff Scientist

Natural Resources Defense Council

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Attachment A

NRDC Filings in A.07-01-024 et al.

| Date | Title |
|-------------------|--|
| July 18, 2007 | Comments of the Natural Resources Defense Council (NRDC) on Water- Embedded Energy Savings Pilot Applications |
| July 25, 2007 | Reply Comments of the Natural Resources Defense Council (NRDC) on Water-Embedded Energy Savings Pilot Applications |
| December 5, 2007 | Comments of the Natural Resources Defense Council (NRDC) on the Proposed "Order Approving Pilot Water Conservation Programs Within the Energy Utilities' Energy Efficiency Programs" |
| December 10, 2007 | Reply Comments of the Natural Resources Defense Council (NRDC) on Proposed Decision of ALJ Weissman "Order Approving Pilot Water Conservation Programs Within the Energy Utilities' Energy Efficiency Programs" |

Attachment B

NRDC STAFF AND CONSULTANT TIME AND EXPENSE RECORDS FOR A.07-01-024 $\it ETAL$. CONTRIBUTING TO D.07-12-050

Audrey Chang

| Date | Description | Hours |
|------------|--|-------|
| 1/29/2007 | review IOU pilot applications | 2 |
| 1/30/2007 | PHC | 1.5 |
| 2/27/2007 | internal call w/ Ronnie, Eric | 0.5 |
| 2/28/2007 | prepare NOI (2 hrs at 1/2 time) | 1 |
| 3/1/2007 | internal meeting w/ Ronnie, Eric | 1.25 |
| 3/12/2007 | call w/ Ronnie, Eric | 0.5 |
| 4/23/2007 | review scoping memo | 0.5 |
| 4/30/2007 | check-in w/ Ronnie, Eric | 0.25 |
| 4/30/2007 | review ALJ ruling re scoping memo | 0.25 |
| 5/7/2007 | coverage strategy meeting w/ Ronnie | 0.5 |
| 5/21/2007 | call w/ Ronnie, Clyde | 1 |
| 5/22/2007 | prepare amended NOI (1 hr at 1/2 time) | 0.5 |
| 6/11/2007 | coordinating call w/ consultant | 0.75 |
| 6/20/2007 | call w/ Clyde | 0.5 |
| 6/25/2007 | call w/ Clyde | 0.25 |
| 7/16/2007 | edit cmts | 0.75 |
| 7/18/2007 | call on comments w/ Ronnie, Clyde | 1 |
| 7/18/2007 | edit cmts | 1.25 |
| 7/24/2007 | edit reply cmts | 1.5 |
| 7/25/2007 | review reply comments | 0.5 |
| 11/28/2007 | review of PD | 0.25 |
| 11/28/2007 | and call w/ Ronnie and Clyde | 1 |
| 12/3/2007 | edit PD cmts | 1.5 |
| 12/3/2007 | call w/ Ronnie and Clyde to discuss PD cmts | 0.5 |
| 12/4/2007 | edit PD cmts | 0.5 |
| 12/6/2007 | call w/ Ronnie and Clyde re PD reply cmts | 0.5 |
| 12/10/2007 | edit PD reply cmts | |
| 12/10/2007 | edit talking points for Commissioner office meetings | |
| 12/12/2007 | edit ex parte notice | |
| 12/19/2007 | edit ex parte notices | 0.5 |
| 2/13/2008 | prepare request for compensation (4 hours) | 2 |
| | Total Hours (Int. Comp. preparation time @ 1/2 | |
| | time) | 24.75 |

Ronnie Cohen

| Date | Description | Hours |
|------------|--|-------|
| 1/29/2007 | review IOU pilot applications | 1.5 |
| 1/30/2007 | PHC | 1.5 |
| 2/27/2007 | internal call w/ Audrey, Eric | 0.5 |
| 2/26/2007 | workshop | 4 |
| 2/27/2007 | workshop | 3 |
| 2/28/2007 | workshop | 4 |
| 3/1/2007 | internal meetings w/ Audrey, Eric | 1.25 |
| 3/12/2007 | call w/ Audrey, Eric | 0.5 |
| 4/23/2007 | review scoping memo | 0.5 |
| 4/30/2007 | check-in w/ Audrey, Eric | 0.25 |
| 4/30/2007 | review ALJ ruling re scoping memo | 0.25 |
| 5/7/2007 | coverage strategy meeting w/ Audrey | 0.5 |
| 5/21/2007 | call w/ Audrey, Clyde | 1 |
| 6/11/2007 | coordinating call w/ consultant | 0.75 |
| 7/16/2007 | edit cmts | 0.5 |
| 7/18/2007 | call on comments w/ Audrey, Clyde | 1 |
| 7/18/2007 | edit cmts | 0.5 |
| 7/24/2007 | edit reply cmts | 0.5 |
| 7/25/2007 | review reply comments | 0.5 |
| 11/28/2007 | review of PD | 0.25 |
| 11/28/2007 | and call w/ Audrey and Clyde | 1 |
| 12/3/2007 | edit PD cmts | 0.5 |
| 12/3/2007 | call w/ Audrey and Clyde to discuss PD cmts | 0.5 |
| 12/6/2007 | call w/ Audrey and Clyde re PD reply cmts | 0.5 |
| | pre-meeting with Clyde to preparer for ex parte | |
| 12/10/2007 | mtgs | 0.5 |
| 12/10/2007 | ex parte meeting with advisor to Comm. Simon | 0.5 |
| 12/17/2007 | ex parte mtgs w/advisors to Grueneich, Chong, Bohn, and Peevey | 2.5 |
| 120111201 | Total Hours | 28.75 |

Eric Wanless

| Date | Description | Hours |
|-----------|--|-------|
| 2/23/2007 | Preperation for workshops | 1 |
| 2/26/2007 | PUC Workshop | 6.75 |
| 2/27/2007 | PUC Workshop | 4.5 |
| 2/28/2007 | PUC Workshop | 7 |
| 3/1/2007 | Workshop debreif w/ Audrey and Ronnie | 0.5 |
| 3/5/2007 | Conversation w/ David Jacot RE: Ideal direction for workshops and pilots to go in | 0.5 |
| 3/6/2007 | Conversation/Lunch w/ Bill Miller and Gerry Hamilton on ideal direction for workshops and filings to go in | 1 |
| 3/12/2007 | Meeting with Audfrey and Ronnie 0. | |
| 3/14/2007 | Looked over ED strawman proposal for pilot resubmitals | 0.5 |
| 3/16/2007 | Working group at the CPUC | 4 |
| 4/6/2007 | Call to discuss IOU proposed pilot questions (Mikhail's request) | 1 |
| 5/5/2007 | Calls to IOU reps to check in | 0.75 |
| 6/7/2007 | Organizing stuff for consultant | 2 |
| 6/11/2007 | Call w/ consultant | 0.75 |
| | Total Hours | 30.75 |

Clyde Murley

| Date | Description | Hours |
|------------|---|-------|
| 6/4/2007 | Review R.0701024 documents. | 0.50 |
| 6/7/2007 | Review NRDC staff's notes on R.0701024. | |
| | Review NRDC staff's notes and proceeeding documentation | |
| 6/11/2007 | in R.0701024; Conference call with clients re same. | 2.50 |
| 6/11/2007 | Review emails from CPUC staff re R.0701024. | 0.20 |
| 6/15/2007 | Begin review of IOU testimony. | 2.20 |
| 6/14/2007 | Review R.07-01-024 proceeding documents. | 1.80 |
| 6/18/2007 | Continue review of IOU testimony and other proceeding documents in prepartion for 6/20 CPUC workshop. | 3.90 |
| 6/19/2007 | Continue review of IOU testimony and other proceeding documents in prepartion for 6/20 CPUC workshop. | 3.40 |
| 6/20/2007 | Prepare for and participate in 6/20 CPUC workshop re IOU supplemental testimony. | 4.70 |
| 6/21/2007 | Participate in settlement-related discussions with parties; Begin preparing 6/26 opening comments. | 4.20 |
| 6/22/2007 | Correspondence with parties re schedule modification and second round of IOU supplemental testimmony. | 0.90 |
| 6/25/2007 | Discussions with parties re settlement process (ie, 6/27 meeting). | 1.10 |
| 6/27/2007 | Prepare for, participate in, and followup to parties' settlement meeting. | 7.70 |
| 7/5/2007 | Review IOUs' summary from 6/27 meeting and email clients re same. | 0.70 |
| 17072007 | Work on 7/18 comments on IOUs' pilot proposals and review | 00 |
| 7/10/2007 | of proceeding documents re same. | 3.20 |
| | Work on 7/18 comments on IOUs' pilot proposals and review | |
| 7/12/2007 | of proceeding documents re same. | 2.60 |
| 7/11/2007 | Begin review of IOUs' supplemental testimony. | 2.20 |
| 7/13/2007 | Work on 7/18 comments on IOUs' pilot proposals and review of proceeding documents re same. | 6.60 |
| 7/16/2007 | Work on 7/18 comments on IOUs' pilot proposals and review of proceeding documents re same. | 1.90 |
| 7/18/2007 | Work on 7/18 comments on IOUs' pilot proposals and review of proceeding documents re same. | 5.20 |
| 7/19/2007 | Review TURN/DRA opening comments on IOU pilot proposals; Correspondence with clients re same. | 1.80 |
| 7/23/2007 | Continue review of TURN/DRA opening comments on IOU pilot proposals; Discuss same with clients. | 1.20 |
| 7/24/2007 | Draft reply comments. | 4.20 |
| 11/26/2007 | Review proposed decision and portions of proceeding record. | 6.20 |
| 11/27/2007 | Review proposed decision and draft memo for clients. | 8.00 |
| 11/28/2007 | Prepare for and meet with clients to discuss response to proposed decision. | 1.80 |
| 11/29/2007 | Review record in proceeding; Consult with parties re PD. | 6.00 |
| 11/30/2007 | Draft PD comments. | 5.00 |

| 12/1/2007 | Draft PD comments. | 5.00 |
|------------|---|--------|
| 12/2/2007 | Draft PD comments. | 4.00 |
| 12/3/2007 | Draft PD comments and send to clients. | 2.80 |
| 12/9/2007 | Review opening comments and proceeding record; Draft PD reply comments. | 8.40 |
| 12/4/2007 | Finalize PD comments. | 4.60 |
| 12/6/2007 | Review PD comments; Draft summary and talking points for CPUC meetings; Discussion with clients re same. | 4.60 |
| 12/10/2007 | Draft PD reply comments; Prepare for ex parte meeting with Commissioner Simon's advisor; Meet with client re same. | 5.80 |
| 12/10/2007 | Participate in ex parte meeting with Commissioner Simon's advisor re PD. | 0.50 |
| 7/24/2007 | Review utilities' reply comments. | 1.30 |
| 7/27/2007 | Review DRA's and TURN's amendment to comments on IOU testimony and ALJ ruling. | 0.80 |
| 12/11/2007 | Draft ex parte notice; Review reply comments. | 2.70 |
| 12/7/2007 | Correspondence with clients and CPUC Energy Division staff re status of studies. | 0.60 |
| 1/8/2008 | Review and summarize final decision. | 3.40 |
| 12/19/2007 | Draft four ex parte notices. | 2.10 |
| 12/17/2007 | Participate in ex parte meetings re PD, with Commissioner Grueneich's advisor, Commissioner Chong's advisor, Commissioner Bohn's advsiors, and Commissioner Peevey's advisor. | 2.50 |
| 12/16/2007 | Prepare for ex parte meetings re PD, with Commissioner Grueneich's advisor, Commissioner Chong's advisor, Commissioner Bohn's advisors, and Commissioner Peevey's advisor. | 4.80 |
| 1/15/2008 | Expand summary of final decision. | 1.70 |
| 1/28/2008 | Correspondence with clients re final decision and intervenor compensation request preparation. | 0.10 |
| 1/29/2008 | Correspondence with clients re final decision and intervenor compensation request preparation. | 0.10 |
| 2/7/2008 | Work on compensation request. | 0.60 |
| 2/8/2008 | Work on compensation request. | 2.70 |
| 2/11/2008 | Work on compensation request. | 0.50 |
| 2/12/2008 | Work on compensation request. | 1.90 |
| | Total Hours (Int. Comp. preparation time @ 1/2 time) | 151.60 |

Expenses

| Date | Amount | Description |
|------------|--------|--|
| 6/20/07 | \$7.40 | BART fare from East Bay to San Francisco and return. |
| 12/11/2007 | \$7.40 | BART fare from East Bay to San Francisco and return. |
| 12/17/2007 | \$7.40 | BART fare from East Bay to San Francisco and return. |

Attachment C

NRDC STAFF AND OUTSIDE EXPERT CONSULTANT QUALIFICATIONS

Audrey B. Chang

111 Sutter Street, 20th Floor, San Francisco, CA 94104 (415) 875-6100

EXPERIENCE

Natural Resources Defense Council, San Francisco, CA, 1/05 – present

Staff Scientist

Promote energy efficiency and renewable energy resources through policy and technical analysis, research, and advocacy in Western energy.

Energy Solutions, Oakland, CA, 11/02 - 1/05

Project Manager

Managed energy efficiency and green building consulting projects for schools and small businesses. Performed energy audits and provided energy saving recommendations.

Stanford University Land & Buildings, Stanford, CA, 6/01 – 3/02

Sustainable Building Guidelines Lead Author

Developed *Guidelines for Sustainable Buildings*, for sustainable design, construction, and operation of Stanford University facilities. Built consensus among administrators, faculty, staff, and students.

Stanford University, Civil & Environmental Engineering Department, Stanford, CA, 1/01 – 3/01 *Graduate Teaching Assistant*

Facilitated laboratory experiments and tutorials for Energy Efficient Buildings class. Topics covered included: efficient lighting systems, daylighting, thermal storage, and passive solar design.

Solar Electric Power Association, Washington, DC, 7/00 – 10/00

Research Intern

Analyzed cost trends and industry barriers of residential photovoltaic systems to determine effectiveness of federal venture cost-share program to promote technology commercialization.

WorldBuild Technologies, Oakland, CA, 9/99 – 6/00

Research Intern

Conducted study to assess potential and market opportunities for green building services in state and local governments. Results shared with U.S. Green Building Council.

Eastside College Preparatory School, East Palo Alto, CA, 3/99 – 6/02

Program Coordinator and Teaching Assistant

Directed team of four teaching assistants in ecological field studies program for disadvantaged middle and high school students. Developed curriculum of weekly interactive lessons in basic ecological principles and integrated program into teachers' classroom lessons.

EDUCATION

Stanford University, Stanford, CA.

M.S. Degree in Energy Engineering (Individually-designed), June 2002

B.S. Degree in Earth Systems (Departmental and Interdisciplinary Honors), June 2002

Honors

- LEED™ Accredited Professional, U.S. Green Building Council, 2003.
- William W. Whitley Citizen Scholar Prize, School of Earth Sciences, Stanford University, 2002.
- Lloyd W. Dinkelspiel Award, Stanford University, 2001.

PUBLICATIONS

- Chang, A., A. Rosenfeld, and P. McAuliffe. "Energy Efficiency in California and the United States: Reducing Energy Costs and Greenhouse Gas Emissions," forthcoming chapter in *Climate Change Science and Policy*, S. Schneider, A. Rosencranz, M. Mastrandrea (eds.).
- Chang, A. "The California Model for Fighting Global Warming with Energy Efficiency: Accomplishments, Current Status, and Next Steps." Published in conference proceedings for *ACEEE Summer Study on Energy Efficiency in Buildings*, 2006.
- Chang, A. "The Development of Stanford University's Guidelines for Sustainable Building," chapter in *Sustainability on Campus: Stories and Strategies for Change*, P. Bartlett and G. Chase (eds.), MIT Press: Cambridge, MA, 2004.
- Chang, A. "Green Meets Green: A Study of Energy Consumption in Stanford University Buildings," Stanford University, Thesis for Goldman Honors Program in Environmental Science, Technology and Policy, June 2002.
- Environmental Stewardship Committee. *The Guidelines for Sustainable Building*, Stanford University, February 2002. Served as Lead Author.
- Willey, T., J. Schaefer, S. Hester, and A. Chang. *Residential PV Systems Cost Report: Cost Analysis for TEAM-UP Residential PV Installations*, Solar Electric Power Association, December 2001.

ERIC WANLESS

ewanless@gmail.com

(650) 814-4255

EXPERIENCE

9/06 - 9/07

Natural Resources Defense Council, San Francisco, CA

Sustainable Energy Fellow

- Work with California power utilities to ensure investments in energy efficiency
- Aid in the implementation of the landmark California Global Warming Solutions Act, which requires the state to reduce its greenhouse gas emissions to 1990 levels by 2020
- Developing an understanding of the California Public Utilities Commission and Energy Commission regulatory processes

6/05 - 1/06

Rocky Mountain Institute, Boulder, CO

Sustainable Energy Fellow

- Recommended greenhouse gas emission offset portfolio options for a large tech firm
- Analyzed and reported on the effectiveness of an automated power load reduction system for PG&E, Southern California Edison and San Diego Gas and Electric
- Designed and evaluated energy efficient daylighting schemes
- Researched and reported on renewable energy technologies, including biofuels

1/05 - 6/06

Stanford University, Stanford, CA

Teaching Assistant

- Taught labs for professor Gil Masters in both his green buildings and renewable and efficient energy systems classes
- Assisted with project development and provided support for students in the Environmental Engineering capstone design class with professor David Freyberg
- Provided extensive feedback to Dr. Ashok Gadgil and students in his sustainable development classes

6/04 - Present

Sustainable Engineering, Bend, OR

Project Engineer

- Co-developed Oregon Department of Transportation Recycling Best Management Practice Manual for Oregon's zero waste initiative
- Researched opportunities for possible projects including a hydrogen fueling station and linear hydropower
- Currently working as a consultant

9/02 - Present

Cosmos Education, San Francisco, CA

Executive Board Member

- Operate and fundraise for nonprofit specializing in science education
- Work extensively in Southern and East African school systems
- Organized "Under African Skies" educational expeditions

EDUCATION

9/04 - 6/06

9/00 - 6/04

MS Energy Engineering, Stanford University, Stanford, CA

BS Environmental Engineering, Stanford University, Stanford, CA

Relevant Coursework: greenhouse gas management, renewable energy and efficiency, green buildings, HVAC, environmental policy, renewable energy policy, international environmental policy, air pollution modeling, electronics, thermodynamics, fluid mechanics, advanced engineering mathematics, engineering economics, Matlab programming

ADDITIONAL INFORMATION

Computer skills

Operating systems: Mac OS, Windows Applications: MS Office, Matlab, DOE2, HEC-

RAS, Photoshop, FrontPage Editor, Lumen Designer

Programming languages: Matlab, basic knowledge of HTML

Ronnie Cohen 111 Sutter Street, 20th Floor San Francisco, CA 94104 (415) 875-6100

Education

Graduate School of Public Policy, University of California at Berkeley Master of Public Policy, May, 1992.

Thesis: Water Supply Management and the California Drought of 1987-1991

Brown University, Providence, Rhode Island

B.A. in Environmental Studies, magna cum laude, honors, December, 1987. Honors Thesis: Innovative Techniques for Open Space Preservation in Rhode Island

Experience

Natural Resources Defense Council, San Francisco, California

Senior Policy Analyst, 9/94 to present

Advocate for reform of U.S. western water policies, with a focus on promoting urban and agricultural water use efficiency, improved water management, and ecosystem restoration. Recent activities include:

- Directing NRDC efforts to develop and pass water efficiency legislation in California
- Researching and writing a report linking water and energy use in California
- Advocating for the California Energy Commission, Public Utilities Commission, and the Department of Water Resources to better integrate energy and water policy
- Serving on the Steering Committee of the California Urban Water Conservation Council
- Leading environmental community efforts to reform water rate structures
- Serving on the Landscape Task Force established by the California Legislature

Responsibilities include conducting policy analysis and preparing reports, comments, and testimony to influence administrative and regulatory proceedings; lobbying; collaborating with other environmental groups and a broad range of stakeholders to develop and implement political and legislative strategies.

Barakat & Chamberlin, Inc., Oakland, California

Associate, 2/93 to 8/94

Consulted on a variety of water resource planning issues. Representative projects and responsibilities included:

- Managing a contingent valuation survey on residential customers' willingness to pay for water supply reliability
- Writing a handbook on water conservation customer incentives
- Completing a water conservation master plan for Marin Municipal Water District
- Developing the conservation element of an integrated resource plan for the Alameda County Water District
- Providing technical assistance for an ongoing water supply reliability forum

Lawrence Berkeley Laboratory, Berkeley, California

Senior Research Associate, Energy Analysis Program, 9/92 to 2/93 Assisted with development of Database on Energy Efficiency Programs. Responsibilities included researching demand-side management (DSM) programs.

The Global Cities Project, San Francisco, California

Writer, 2/91 to 8/91

Researched and wrote *Open Space: Preservation and Acquisition*, a handbook for local government officials.

Resource Integration Systems, Ltd. (RIS), Granby, Connecticut

Recycling Consultant, 1/89 to 6/90

Developed and implemented recycling programs for public and private sector clients. Responsibilities included extensive client contact, as well as research, analysis, and writing on topics related to collection, processing, and marketing of recyclable materials.

Publications

"The Water-Energy Nexus: Rethinking Our Approach to Water Supply" *Home Energy Magazine*, (Berkeley, CA: 2007).

Energy Down the Drain: The Hidden Costs of California's Water Supply, (San Francisco: NRDC, 2004).

Haywire: Alfalfa, Irrigation Subsidies, and the Competition for California Water, (San Francisco: NRDC, 1999).

Agricultural Solutions: Improving Water Quality in California Through Water Conservation and Pesticide Reduction, (San Francisco: NRDC, 1998). (with Jennifer Curtis)

The Value of Water Supply Reliability: Results of a Contingent Valuation Survey of Residential Customers, (Oakland: Barakat & Chamberlin, 1994). (with Gary Fiske)

A Guide to Customer Incentives for Water Conservation, (Oakland: Barakat & Chamberlin, 1993). (with Gary Fiske)

Open Space: Preservation and Acquisition, (San Francisco: The Global Cities Project, 1991).

Clyde S. Murley

Consulting on Energy and Environment

1031 Ordway St Albany, CA 94706 clyde.murley@comcast.net phone: (510) 528-8953 mobile: (510) 529-9256 fax: (510) 295-2598

PROFESSIONAL EXPERIENCE

2005 to present—Independent Consultant, Albany, California

Serve as regulatory advocate and technical, policy, and rate analyst for clients participating in or monitoring cases before the California Public Utilities Commission and California Energy Commission, primarily regarding energy efficiency, renewable energy, demand response, environmental issues, integrated resource planning, and direct access electricity service. Prepare regulatory filings and represent clients in regulatory hearings, workshops, and negotiations. Provide strategic planning, project management, and electricity procurement services on energy and environmental matters. Experienced in mediation and managing large multi-stakeholder processes.

2000–05—**Senior Program Manager, Grueneich Resource Advocates**, San Francisco, CA

Represented public and private sector clients pursuing energy regulatory and policy goals relating to energy efficiency, distributed energy resources, demand response, and provision of direct access electricity services. Served as regulatory advocate for clients in CPUC and CEC proceedings, including preparation of filings and testimony, cross examining witnesses, case management, and negotiated settlements. Managed implementation of major energy efficiency and demand response projects and direct access electricity procurement for large, multi-campus customers.

1995–2000 — Program Director ('95-'97), Core Faculty ('95-'99), and Adjunct Faculty ('99- 2000), Master of Arts Program on Environment & Community, Antioch University; Seattle, Washington; Yellow Springs, Ohio

Founding director of interdisciplinary, practitioner-oriented master's program focusing on the institutional, scientific, social, economic, regulatory, and policy dimensions of environmental issues and problems. Developed and taught courses in theories and practices of social-environmental change, mediation, and environmental, ecological, and community-based economics.

1998–99 – Consultant, Glen Helen Ecology Institute, Antioch Univ., Yellow Springs, OH

Designed and directed year-long community-based collaborative planning process to develop a long-range Sustainability Master Plan for a regional nature preserve and educational institute. Master Plan focused on developing working models in the areas of sustainable development, environmental and energy management, regenerative design, ecological restoration, community-based organic agriculture, and democratic decision-making processes about issues concerning environment, community, and development.

PROFESSIONAL EXPERIENCE -- continued

1991–95 — Senior Project Scientist ('91-'93) and Consultant ('93-'95), Natural Resources Defense Council (NRDC); Honolulu, Hawaii

Co-directed NRDC's Hawaii Energy Project. Developed new policy, regulatory and legislative approaches for integrating environmental considerations into utility and land-use planning throughout Hawaii. Led numerous multi-party, collaborative problem-solving forums throughout the Hawaiian Islands pertaining to the development of new utility and environmental planning regulations and policies. Drafted and lobbied in support of new energy and environmental regulations and legislation. Worked regularly with senior utility executives and staff, agency directors and staff, elected officials, and public interest and native Hawaiian groups. Served as NRDC's regulatory advocate and expert witness for year-long energy planning evidentiary hearing process. Played active role in public education and outreach, media relations, program administration, and fundraising.

1988–91—Regulatory Analyst ('88-'89) and Regulatory Program Specialist ('89-'91), Environmental Advisory and Compliance Branch, California Public Utilities Commission; San Francisco, CA

- Directed Commission-wide team responsible for overseeing all California investor-owned energy utilities' compliance with Commission's regulations concerning energy efficiency programs;
- Interpreted and implemented the California Environmental Quality Act with respect to hundreds of proposed projects dealing with energy, water, and transportation;
- Researched and analyzed proposed regulatory approaches for emerging, non-regulated environmental and public health issues (e.g., EMF);
- Advised Commission on environmental and health regulatory compliance issues;
- Managed major environmental impact report (EIR) on proposed natural gas pipeline project in the western U.S., and analyzed energy efficiency alternatives to project;
- Testified before the Commission and the State Legislature;
- Managed numerous contracts with energy analysts, scientific researchers, and environmental impact report consultants;
- Managed major Commission study on possible health effects of electric and magnetic fields.

1988—**Environmental Planning Consultant, Brown, Vence & Assoc**, San Francisco, CA

Performed research and analysis, formulated policy, and developed state-of-the-art plans for county-level management of hazardous materials and wastes.

1985–86—Research Manager, Pacific Gas & Electric Company, San Ramon, CA

Designed and managed yearlong economic analysis of over 500 electric utility research projects. Evaluated company's research needs with respect to utility-sponsored energy efficiency programs and demonstration projects. Managed five staff and two teams of consultants. Designed and facilitated numerous technical workshops.

1983–84 — Consultant, Future Resources Associates, Inc., Berkeley, CA

Conducted research and analysis and prepared report on comparative safety risks associated with residential sector energy technologies.

EDUCATION

Coursework in **Ph. D. Program** in *Environmental Studies*, 1997-98 **Antioch New England Graduate School**, Keene, New Hampshire

Master of Arts in *Energy and Resources*, 1988 University of California, Berkeley

Bachelor of Arts in *Environmental Sciences* (Phi Beta Kappa), 1982 **University of California**, Berkeley

VERIFICATION

I, Audrey Chang, am a representative of the Natural Resources Defense Council and am authorized to make this verification on the organization's behalf. The statements in the foregoing document are true to the best of my knowledge, except for those matters that are stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 19, 2008, at San Francisco, CA.

Audrey Chang

Natural Resources Defense Council 111 Sutter Street, 20th Floor

San Francisco, CA 94104

415-875-6100

achang@nrdc.org

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the "REQUEST FOR AWARD OF INTERVENOR COMPENSATION BY THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) FOR SUBSTANTIAL CONTRIBUTIONS TO DECISION 07-12-050" in the matter of A.07-01-024 *et al* to all known parties of record in this proceeding by delivering a copy via email or by mailing a copy properly addressed with first class postage prepaid.

Executed on February 19, 2008 at San Francisco, California.

Shari Walker

Natural Resources Defense Council

San Woll

111 Sutter St., 20th Floor San Francisco, CA 94104

415-875-6100

Swalker@nrdc.org